

The Examiner objected to the drawings for various reasons. The application as filed had 10 figures. But, only seven were listed in the Brief Description Of The Drawings. Also, as noted by the Examiner, figure 10 is a duplicate of figure 4. Figures 1-7 have been amended and replacement drawing sheets are attached. The amendments delete the numbers 13- 19 respectively on the bottom of each page. Figure 10 is requested to be deleted.

It is submitted that the objections to the drawings have been overcome.

2. Regarding the objections to the disclosure.

Figures 8 and 9 have been added to the Brief Description Of The Drawings. Also text has been added to describe the content of figure 7. This text adds no new matter because it only describes what is shown by the figure. An amendment to the specification is enclosed in which the new text is contained; it is requested entry.

3. Regarding informalities in the claims.

The Examiner's proposed changes to the claims are appreciated. Most of the claims have been amended to address the informalities cited by the Examiner. In a few instances the applicant prefers to adopt or retain a different punctuation protocol. The applicant's selected protocol is to use semi-colons after the preamble and after each claim element. Commas are selectively used within phrases when appropriate for clarity. Colons are not used. A listing of the claims is enclosed showing the amendments; which are requested entry.

4. Regarding the rejection under section 112.

The Examiner rejected Claim 13 under section 112 as being indefinite in that it fails to point out what is included or excluded by the claim language; noting that it is an omnibus type claim. This rejection is traversed.

While claim 13 is broad, it does further define two of the steps in claim 3, the step of identification of the problem and the step of automatic reformulation as a natural language query. Claim 13 has been amended to specify that the analysis is performed to determine functional relationships. In particular, the problem identification step is performed by an analysis to determine functional relationships between components under consideration. Functional relationships are expected to be available from the user input. As explained in the specification at 0019 with reference to Fig. 4, the functional relationship of the desired action component, "scrub" as indicated by the arrow and the object component "hand" provide functional elements in the problem. Claim 13 calls for an analysis to determine the

functional relationships. Root cause analysis and cause affect relationships are two functional analysis tools. With the amendment and in view of the above explanation it is submitted that claim 13 is not indefinite under section 112.

5. Regarding the rejection under section 102.

The Examiner rejected claims 1-15 as being anticipated by the Pustejovsky et al. publication. This rejection is traversed.

This rejection was the subject of a telephone interview on May 2, 2006 with the undersigned and the inventor Mr. Todhunter. During the interview it was pointed out that the essence of the invention is that the query is automatically formulated from the results of the problem identification step. The essence of the invention is the extraction of a problem statement from the artifacts generated by use of a problem analysis tool and forming and submitting a query without the user being involved in the query formulation operation.

Pustejovsky does not teach or suggest such an automatic query formulation. In fact Pustejovsky only teaches that the user creates the query. This is a distinctly different invention than that described by Pustejovsky et al. In the cited patent, Pustejovsky describes a system for retrieval of information from an encoded database representation of information extracted from text given a user interaction where in the user has submitted a query. Note the key distinction here is that the action of formulating and submitting the query is left with user. The main function of the Pustejovsky invention is the mechanism whereby such a submitted query is transmitted to and processed against the database to produce results. As applied to claim 1, the Examiner stated that Pustejovsky et al. discloses problem identification (solving issues such as book processing information of an electronic book at 0018, lines 3 and 4, automatic problem reformulation as a natural language or Boolean query (section 0030, lines 4 and 4 (sic)) and automatic submitting the above query to a database (section 0034, last line and section 0038, line 2). .

More specifically, in rejecting claim 1, the examiner makes several statements that Pustejovsky discloses problem identification, automatic problem reformulation as a query, and automatic submitting of the query to a database. In fact, no such teaching is seen in Pustejovsky.

The examiner makes reference to “solving issues such as book processing information of an electronic book” (sec. 0018, lines 3 & 4). However, this statement is

clearly made in the context of generally describing the problem addressed by the invention and not as an example of the problem that is to be solved by a user through the application of the embodiment of the system.

The examiner cites Pustejovsky as disclosing automatic problem reformulation as a query (sec 0030, lines 4 and 5). The cited section makes no reference to such reformulation and no such reference is described by Pustejovsky. Furthermore, Pustejovsky describes the method of entering the query (sec 0040, lines 5, 6, and 7) as being specifically one in which the user directly supplied the query. While various methods of entry are further described, they all clearly suggest direct user formulation and submission of the query.

Thus, Pustejovsky fails to disclose any of the steps according to the principles of the present invention.

The examiners rejection of claim 2 is generally on the same basis as the rejection of claim 1. The same arguments presented above are applicable.

In rejecting claim 3, the examiner again states that Pustejovsky is disclosing the identification of a problem, the reformulation as a natural language query, and the automatic submission of the query. However, the component cited (fig 2, device 249) as being the problem identification component is merely an input device which Pustejovsky describes as being used to enter the query. The clear implication is that the problem identification, query formulation, and submittal of the query are all steps performed by the user.

In rejecting claim 4, the examiner states that Pustejovsky discloses the reformulation of a problem as a natural language query (sec 0038, lines 1 and 2 and sec 0034, last ten lines). The cited text in fact does not describe the reformulation of a problem as a natural language query done by a portion or portions of a program, only that the query is matched against the database.

In rejecting claim 5, the examiner once again asserts that sec 0030, lines 4 & 5, of Pustejovsky disclose reformulation of a problem as a query. As noted above, there is no such disclosure in the Pustejovsky and in fact Pustejovsky clearly has the user construct and submit the query, see sec 0040, line 7-12.

In rejecting claim 6 the Examiner states that Pustejovsky discloses at least one knowledge bas as a semantic knowledge base (sec 0034, last four lines). Those last four lines make no mention of use of a semantic knowledge base.

In rejecting claim 7 the Examiner asserts that Pustejovsky discloses the knowledge base is resident on a storage medium with the computer. Although the cited section does not disclose this, it is recognized the knowledge base is stored on a computer.

Claims 9, 10 and 11 as rejected are traversed on the previously discussed bases.

The rejection of claim 12 is on the basis that Pustejovsky teaches that the query is submitted to the knowledge base without intervention by the user, citing figure 2, device 243, 232 and 240. However as noted, in Pustejovsky, the user creates and submits the query.

In rejecting claim 13, the Examiner states that Pustejovsky discloses identification of the problem is done by an analysis of functional relationships between components and the consideration (sec 0023 lines 1-3). Those lines state "in a specific embodiment the present invention provides a method for querying information based upon a publication on a portable electronic display." This is completely distinct from any disclosure's suggestion of an analysis of functional relationships between components under consideration. Similarly, the Examiner asserts that the automatic reformulation as a query is done by translating a functional relationship into a natural language query shown at sec 0030, line 4 and 5. However as noted above, there is no disclosure or suggestion of such automatic reformulation.

In rejecting claim 14, the Examiner asserts that Pustejovsky discloses identification of the problem is done by root cause analysis that establishes one or more nodes between events under consideration citing Fig. 1 devices 231, 233, 235, 237, and 239. However, description of those devices makes no mention of root cause analysis nor does any analysis of the text allow suggestion that a functional analysis tool is being employed or that such a tool is root cause analysis.

In rejecting claim 15, the Examiner cites Pustejovsky as disclosing that a knowledge base is a semantic analysis knowledge base citing section 0034, last 10 lines. Although those last ten lines make reference to "syntactic information" and "semantic information," they do not state nor suggest that an automatically formed query is submitted to a semantic analysis knowledge base.

New claims have been added, in particular claims 16-27, which claim the invention in article manufacture form and claim 28, which depends from claim 1.

In view of the interview and the foregoing remarks, it is submitted that the objections and rejections have been overcome. Reconsideration is requested.

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